Yet, the exemption is, by its terms, only applicable when compliance with the CWA actually affects or impairs navigation.[6]

The Eighth Circuit's expansive interpretation of the navigation exemption is unwarranted and concerns not only Corps operations on the Missouri River, but also a large number of other Corps operations nationwide.

Indeed, the CWA itself warrants a broad interpretation with narrowly drawn exceptions. The CWA is intended to be comprehensive. Its stated objective is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA establishes a national goal of attaining, wherever possible, "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a)(2). To achieve this goal, the CWA requires each State to establish and implement water quality standards. *See* 33 U.S.C. §§ 1313(a) & (c)(2)(A). Water quality standards are to protect the public health or welfare, enhance the

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[6] All federal agencies (including Bureau of Reclamation, the entity that operates the largest dams of all) must abide by the Act, but a limited exemption applies if the authority of the Secretary of the Army to conduct navigation is affected or impaired:

> Each department, agency, or instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any property or facility, or (2) engaged in any activity resulting, or which may result, in the discharge or runoff of pollutants . . . shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner, and to the same extent as any nongovernmental entity. . . .

33 U.S.C. § 1323(a); and:

> This chapter shall not be construed as . . . (2) affecting or impairing the authority of the Secretary of the Army (a) to maintain navigation or. . . .

33 U.S.C. § 1371(a).

quality of water, and serve the purposes of the CWA. 40 C.F.R. § 131.3(i); 33 U.S.C. § 1313(c)(1).

The Amici assert that the navigation exception to the CWA should be narrowly construed, especially when considering the purpose and intent of the CWA and the burden that the CWA places on the States to control and abate pollution.

Ultimately, through the application of the CWA, States are making real progress in protecting and restoring the biological, physical, and chemical integrity of the Nation's waters impacted by dam pollution. States will be unable to fulfill their congressional mandate to protect water quality in the absence of authority to enforce the EPA-approved water quality standards. States must have the authority to enforce water quality standards on the large federal facilities maintained by the Corps, particularly when the Corps has not shown that such enforcement will actually significantly impair or affect navigation.

ARGUMENT

The Eighth Circuit held that any claim or invocation of navigation by the Corps will supersede the Corps' responsibility to abide by the CWA. In doing so, the Eighth Circuit failed to require the Corps to demonstrate an actual significant affect on navigation as should be required before granting an exemption from the CWA.

The Clean Water Act is comprehensive and applies to all "waters of the United States."[7] It delegates much of the

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[7] The Court has also recently granted certiorari in two cases that are different from the issue here but deal with the scope of "waters of the United States" in light of *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001). *United States v. Rapanos*, 376 F.3d 629 (6th Cir. 2004), *reh'g en banc denied*, (Nov. 2, 2004), *cert. granted*, 126 S.Ct. 414, 163 L.Ed.2d 316, 73 U.S.L.W. 3466 (U.S. Oct. 11, 2005) (No. 04-1034); *Carabell v. U.S. Army Corps of Engineers*, 391 F.3d 704 (6th Cir. 2004), *cert. granted*, 126 S.Ct. 415, 163 L.Ed.2d 316, 73 U.S.L.W. 3632 (U.S. Oct. 11, 2005) (No. 04-1384).

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Nation's pollution control responsibility to the States. The policy objective is "to recognize, preserve and protect the primary responsibilities and rights of States to prevent, reduce and eliminate pollution." 33 U.S.C. § 1251(b). Under the Act, "pollution" is defined as encompassing all human activities that alter the chemical, physical, and biological integrity of water. 33 U.S.C. § 1362(19). Consistent with this definition and in order to achieve the Act's ambitious policy, Congress authorized States to protect and restore beneficial uses of rivers and streams through the adoption and achievement of water quality standards. 33 U.S.C. § 1313. These standards are a powerful tool for combating pollution because they include not only numerical criteria, but designated uses adopted pursuant to the Act's goal to provide for "the protection and propagation of fish, shellfish and wildlife" and "for recreation in and on the water." 33 U.S.C. § 1251(a)(2). Protection of these uses is at the core of the Act's purpose and goals. *PUD No. 1 of Jefferson County v. Washington Dep't of Ecology*, 511 U.S. 700, 716-719 (1994) (*PUD No. 1*).

Although the CWA is designed for comprehensive protection of the Nation's waters, the Corps, operator of some of the largest dams in the United States, holds a limited exemption for navigation. The exemption has been interpreted too broadly by the Eighth Circuit Court of Appeals.

Those disputes address the scope of the terms "waters of the United States" and "navigable waters," terms used throughout the CWA. Petitioners argue in those cases that the terms are used in the CWA to limit the scope of CWA to only larger "federal" waters. It is noteworthy that even former EPA administrators who support an expansive federal role assert that State responsibilities are part of a cohesive state/federal regulatory effort over all "waters of the United States." *See* Amicus Brief of Former EPA Administrators, 2006 WL 13920. The present matter creates an additional dynamic. The Eighth Circuit Court of Appeals held that the Army Corps of Engineers was entitled to escape water quality regulations because such regulation could "affect navigation," even though an alternative to correct the water quality problem would exist that would not affect navigation. If the Eighth Circuit's broad interpretation is allowed to stand, Corps use of any "navigable" waterway would arguably evade state regulation under the CWA.

I. THE ARMY CORPS OF ENGINEERS OPERATES MANY LARGE DAMS.

The federal government operates the dams with the largest reservoirs in the United States.[8] The two largest man-made reservoirs are Lake Mead (Hoover Dam) and Lake Powell (Glen Canyon Dam) operated by the Bureau of Reclamation. *Id.* The next three are part of the Missouri River main stem system operated by the Army Corps of Engineers. Lake Oahe (Oahe Dam) and Lake Sakakawea (Garrison Dam) in North and South Dakota are the third and fourth largest reservoirs. *Id.* The fifth largest is Fort Peck Lake in Montana.

These three Corps dams on the Missouri River are, along with three other large Corps dams in South Dakota, operated as multipurpose projects. The Corps' Missouri River holdings are "an integrated system providing for flood control, navigation, irrigation, hydropower, water supply, water quality, recreation, and fish and wildlife." March 2004, Record of Decision, Missouri River Master Water Control Manual Review and Update, http://www.nwd-mr.usace.army.mil/rcc/reports/pdfs/recordofdecision.pdf.

The Missouri River reservoirs are only part of the Corps' holdings. The Corps "has built an intracoastal and inland network of 12,000 miles of commercial navigation channels and over 200 locks and dams for navigation purposes."[9] The Corps operates 368 reservoirs for flood control. *Id.* Many of these installations are multipurpose facilities. The Corps operates 75 hydropower plants and is the "largest operator of hydroelectric power plants in the United States." http://www.corpsresults.us/pdfs/hydropower.pdf.

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[8] United States Society of Dams, http://www2.privatei.com/~uscold/uscold_s.html.

[9] http://www.usace.army.mil/commander.html.

II. DAMS, PARTICULARLY HYDROPOWER DAMS, PRESENT SERIOUS WATER QUALITY PROBLEMS.

There are abundant scientific studies on the variety of water quality impacts arising from impoundment of water behind dams and operation of hydroelectric facilities.[10] The type and degree of impact varies depending upon the size and type of dam, its manner of operation, and the nature of the river or stream system.[11]

When free-flowing rivers are impounded behind hydropower dams, they often stratify into layers of warmer waters on top and colder, oxygen-deprived waters below, with neither temperature reflecting the natural condition of the river system.[12] The water temperature and quantity of dissolved oxygen can violate water quality standards. Violation of water quality standards is no mere technical concern. Temperature deviations alone can affect the mortality of fish and change the population of fish species above and below the dams. Further, the amount of oxygen in the water column can have a dramatic impact on the kinds of organisms that can survive below the dam.[13] Varying temperatures and oxygen levels in the reservoir also affect the water chemistry of the entire system and can cause

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[10] *See*, for example, the references listed by the U.S. Environmental Protection Agency in EPA's Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, Chapter 6, Section VI.B., *available at* http://www.epa.gov/nps/MMGI/Chapter6/ch6-6.html.

[11] *See generally* Collier, M., R.H. Webb and J.C. Schmidt, *U.S. Geological Survey, Dams and Rivers: Primer on the Downstream Effects of Dams*, USGS Circular 1126 (1996), *available at* http://pubs.er.usgs.gov/pubs/cir/cir1126 (describing the effect of temperature on fish below the Flaming Gorge dam on the Green River) (*USGS Primer*).

[12] Peterson, M.J. et al., *U.S. Department of Energy, Regulatory Approaches for Addressing Dissolved Oxygen Concerns at Hydropower Facilities*, DOE/ID-11071 (Mar. 2003) at 1-5, *available at* http://hydropower.id.doe.gov/turbines/pdfs/doeid-11071; *USGS Primer*, at 58.

[13] *Id.*

toxic chemicals such as hydrogen sulfide and ammonia to be released in harmful concentrations.[14]

Another water chemistry impact of hydropower dams is the entrainment or supersaturation of atmospheric gases, including nitrogen, as water is spilled over high dams. These gases are taken into the circulatory systems of fish. As the fish move to different levels of the river, the gases come out of solution, forming bubbles that can cause a potentially lethal effect similar to the "bends" in scuba divers.[15]

Also, evaporation and runoff into reservoirs affects reservoir water quality by increasing salinity.[16]

Dams cause changes in water movement and may result in increased suspension and deposition of soil in reservoirs. Again, this is no mere technicality. Impoundment of soil-laden water in reservoirs may result in changes to the flow regimes of rivers with significant impacts to downstream aquatic ecosystems.[17] In some river systems, the releases from dams of low sediment water may cause channel incision, changing riverbed composition and riparian habitat.[18] Although effects vary depending on the dam, sediment will build up behind dams and/or cause major impacts on downstream estuaries and wetlands.[19]

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[14] *Regulatory Approaches*, at 1.

[15] National Research Council, National Academy of Sciences, *Upstream: Salmon and Society in the Pacific Northwest* (1996), at 229, *available at* http://books.nap.edu/books/0309053250/html/index.html (*Upstream*); Abernathy, C.S., B.G. Amidan, U.S. Department of Energy, *Laboratory Studies of the Effects of Pressure and Dissolved Gas Supersaturation on Turbine-Passed Fish*, DOE/ID-10853 (Mar. 2001) at 2.3-2.5, *available at* http://hydropower.id.doe.gov/turbines/pdfs/doeid-10853.pdf.

[16] *USGS Primer*, at 43.

[17] *See USGS Primer*, generally.

[18] *USGS Primer*, at 38-45 (heavy downstream erosion of the Chattahoochee River below Buford Dam as a result of dam releases).

[19] *Upstream*, at 234-35 (noting the loss of over 20,000 acres of tidal swamps, 10,000 acres of tidal marshes, and 3,000 acres of tidal flats in

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Collectively, the water quality harm attributable to dams, and in particular, hydropower dams, covers the full range of water quality impacts that the Act defines as "pollution." It was this range of impacts that Congress authorized States to address.

While the Corps operates hydropower dams, it also claims to be exempt from the CWA because nagivation is involved. The Corps dams operate for multiple purposes and ought to be regulated according to the actual type of project use.

A. Federal and State Agencies Have Concluded That Dams Cause Water Pollution.

1. Environmental Protection Agency and State Water Pollution Control Agencies.

The EPA and State water pollution control agencies have repeatedly evaluated the impacts of dams and determined that dams impact water quality.

In 1972 Congress directed EPA to develop guidelines and methods to control pollution from "changes in the movement, flow, or circulation of any navigable waters or ground waters, including changes caused by the construction of dams." 33 U.S.C. § 1314(f)(1) & (2) part (F). In response, EPA published *The Control of Pollution Caused By Hydrographic Modifications* (1973). EPA described water quality problems caused by dams including lowered dissolved oxygen levels and other impacts. *Id.*

Again, in 1987 Congress required EPA to conduct a study of the water quality impacts of dams. Pub. L. No. 100-4, Title V, § 524, 101 Stat. 89 (1987). EPA provided an updated account of the adverse water quality impacts from stratification of impounded water including "low hypolimnetic dissolved oxygen, increased iron and manganese, eutrophication,

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the past century from the Columbia River estuary as a result of the accumulation of sediment behind dams).

hydrogen sulfide, sediment movement, flow regulation, thermal changes, and reaeration denial." U.S. Environmental Protection Agency, *Report to Congress: Dam Water Quality Study*, EPA 506/2-89/002 (Mar. 1989) at v. EPA concludes that "[i]mpoundments can modify the physical, chemical, and biological characteristics of the free-flowing aquatic ecosystem." *Id.* at VII-2.

States report similar results. State agencies are required to submit plans to the EPA to address "Total Maximum Daily Loads" (TMDLs). In these reports, States evaluate sources and levels of pollution in water quality impaired waters. 33 U.S.C. § 1313(d). The reports analyze all waters, including streams with hydroelectric dams.

A recent TMDL report in the State of Washington concludes that seasonal violations of the water quality standard for dissolved gas are directly attributable to hydroelectric projects.[20] In a related TMDL report, hydropower has been identified as the major cause of water temperature standard violations in the Columbia/Snake River basin.[21]

The EPA has reviewed data from the States of New Hampshire and Maine and determined that the "presence of many dams" is a major cause of water quality impairment (particularly dissolved oxygen) in the Salmon Falls River watershed.[22] The EPA notes its approval of Maine's conclusion that changes to dam operations are necessary

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[20] U.S. Environmental Protection Agency, Washington Department of Ecology and Spokane Tribe of Indians, *Total Maximum Daily Load for Total Dissolved Gas in the Mid-Columbia River and Lake Roosevelt* (June 2004) at x-xi, *available at* http://www.ecy.wa.gov/pubs/0403002.pdf.

[21] U.S. Environmental Protection Agency, EPA Region 10 Fact Sheet No. 6, Columbia/Snake River Problem Assessment for Temperature, Fall 2001, *available at* http://yosemite.epa.gov/R10/WATER.NSF/ 840a5de5d0a8d1418825650f00715a27/15ef780a7691edef88256ae800797e05/$FILE/ATT1EWLU/col-snake%20TMDL%20Fact%20Sheet%20%236.pdf.

[22] U.S. Environmental Protection Agency, Letter Notification of Approval of Salmon Falls River TMDLs, November 22, 1999, at 6, *available at* http://www.epa.gov/region1/eco/tmdl/ssets/pdfs/me/salmonfallsriver.pdf.

in order to achieve water quality standards for dissolved oxygen.[23]

B. Federal and State Courts Have Concluded That Dams Cause Water Pollution.

This Court's decision in *PUD No. 1* recognizes the impacts of dams on water quality. That case addressed a hydropower dam proposed by a city and local utility district. The Court noted that a "sufficient lowering of the water quantity in a body of water could destroy all of its designated uses, be it for drinking water, recreation, navigation or, as here, as a fishery." *Id.* at 719. The Court described Congress's "broad conception of pollution" as evincing a concern with the "physical and biological integrity of water." *Id.* Further, the Court cited Section 304(f) of the Act, 33 U.S.C. § 1314(f), as an express recognition by Congress that "water 'pollution' may result from 'changes in the movement, flow, or circulation of any navigable waters . . . including changes caused by the construction of dams.'" *Id.* at 720.

Also, after reviewing considerable evidence and scientific testimony in *National Wildlife Federation v. Gorsuch*, 693 F.2d 156, 161 (D.C. Cir. 1982), the court of appeals concluded that dams "cause a variety of interrelated water quality problems." While dealing with a different CWA issue, the *Gorsuch* decision provides a thorough description of the water quality impacts of dams. The D.C. Circuit summarized impacts including: (1) low dissolved oxygen; (2) dissolved minerals and nutrients; (3) temperature changes; (4) sediment; (5) supersaturation (dissolved gas); and (6) a variety of other water quality impacts including indirect negative impacts on groundwater and reductions in stream flow and waste assimilation capacity. 693 F.2d at 161-164.[24]

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[23] *Id.* at 7, 15.

[24] The *Gorsuch* case dealt with an issue not presented in this case: whether dams require a permit under 33 U.S.C. § 1342. In *Gorsuch*, the D.C. Circuit deferred to EPA's decision not to require such a permit but expressly left open the question of whether water pollution from the dams could be addressed by states. 693 F.2d at 182-183.

Consistent with *Gorsuch*, other circuits have at least implicitly acknowledged the water quality impact of dams. *See, e.g., State of Missouri ex rel. Ashcroft v. Department of the Army*, 672 F.2d 1297, 1304 (8th Cir. 1982) (not questioning that the operation of the dam caused soil erosion and reduction of oxygen); *United States ex rel. Tennessee Valley Authority v. Tennessee Water Quality Control Board*, 717 F.2d 992, 1000 (6th Cir. 1983) (acknowledging that dams might be subject to state or local regulation as nonpoint sources of pollution); *National Wildlife Federation v. Consumers Power Co.*, 862 F.2d 580, 586 (6th Cir. 1988) (noting that "any resulting pollution in the form of entrained fish is, as in *Gorsuch*, an inherent result of dam operation").

C. The Corps Does Not Dispute That Its Dams Violate Water Quality Standards and Affect Fisheries.

The hydropower facilities at issue in this proceeding have violated water quality standards in North Dakota. Those standards provide that Lake Sakakawea is a "cold water fishery" requiring the water to support the growth of salmonid fishes and associated water life. *In re Operation of the Missouri River System Litigation*, 418 F.3d at 917. In 2002, Sakakawea suffered from a loss of 90 percent of its smelt biomass due to a decline in cold water habitat. Affidavit of Jeffrey Hendrickson, App. 3. Smelt are forage fish for walleye and other game fish. *Id.* Recognizing that further reductions of cold-water habitat would decimate fisheries on Sakakawea, North Dakota filed suit in 2003. Petitioner's App. 23. North Dakota asserted that reductions of the volume of cold-water habitat in the lake would violate water quality standards and would continue to impair a viable cold-water fishery system. *Id.*; *see also* Affidavit of Mike Sauer, Petitioner's App. 141-155.

In response, the Corps acknowledged that its then-existing operational manual was designed in such a way as to affect the water quality standards and the cold-water fisheries: "it is reasonable to believe that under the Master Manual criteria, that the cold-water fishery volume would

go to zero." Preliminary Injunction Testimony of Lawrence Cieslik, Chief of Operations for the Missouri River, App. 8. The Corps has since revised its operating manual in other ways, but is not willing to accommodate or comply with State water quality standards.

The Corps also recognizes that dissolved oxygen and water quality problems have occurred below Corps dams in southeastern States and that dams cause adverse water quality effects. http://www.corpsresults.us/pdfs/hydropower.pdf. Yet, the Corps (the biggest hydropower producer in the Nation) claims to be exempt from water quality standards if any navigation occurs on the stream whatsoever.

III. THE CLEAN WATER ACT AUTHORIZES STATES TO PROTECT WATER FROM POLLUTION BY DAMS.

A. The CWA Was Intended To Be Comprehensive.

The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). In order to achieve these ends, the Act has two complementary systems. One system is the prohibition of discharges of pollutants. This system is the National Pollution Discharge Elimination System, or NPDES, which requires dischargers to obtain permits that place limits on the type and quantity of pollutants that can be released into the Nation's waters. 33 U.S.C. § 1342. This system is not at issue in this case.

The other system, and the one relevant to the case before this Court, is the system of water quality standards. The CWA establishes a national goal of attaining, wherever possible, "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." 33 U.S.C. § 1251(a)(2). The CWA requires each State to establish and implement water quality standards. *See* 33 U.S.C. §§ 1313(a) & (c)(2)(A). Water quality standards protect the public health or welfare, enhance the quality of water and serve the

purposes of the Act. 40 C.F.R. § 131.3(i). Their purpose is expressed in federal regulation as:

> A water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (the Act). "Serve the purposes of the Act" (as defined in sections 101(a)(2) and 303(c) of the Act) means that water quality standards should, wherever attainable, provide water quality for the protection and propagation of fish, shellfish and wildlife and for recreation in and on the water and take into consideration their use and value of public water supplies, propagation of fish, shellfish, and wildlife, recreation in and on the water, and agricultural, industrial, and other purposes including navigation.
>
> Such standards serve the dual purposes of establishing the water quality goals for a specific water body and serve as the regulatory basis for the establishment of water-quality-based treatment controls and strategies beyond the technology-based levels of treatment required by sections 301(b) and 306 of the Act.

40 C.F.R. § 131.2.

State water quality standards must contain several distinct elements. 40 C.F.R. § 131.6. The State must establish "designated uses" of the State's waters, such as fishing, swimming, and/or protection of aquatic life. 33 U.S.C. § 1313(c)(2)(A); 40 C.F.R. § 131.6(a). The State must develop specific water quality "criteria" based on scientific rationale that are designed to preserve and protect the designated uses. 40 C.F.R. §§ 131.6(a), 131.11(a)(1). Water quality criteria may be expressed in numeric terms or in narrative terms (such as, "temperature must be less than or equal to 65 degrees Fahrenheit" or "waters shall be free of visible garbage," respectively). The State must develop

an "antidegradation" policy designed to prevent water quality from deteriorating. 40 C.F.R. §§ 131.6(d), 131.12. Each State's water quality standards must be evaluated and revised to protect designated uses at least every three years. 33 U.S.C. § 1313(c)(1).[28]

The CWA further requires that States identify and submit plans for recovering any river or stream segments that are not meeting water quality criteria. 33 U.S.C. § 1313(d). Subsection (d) requires States to account for all of the sources of pollution in any such impaired waters through TMDLs, and subsection (e) requires States to develop plans for addressing those sources. 33 U.S.C. § 1313(d). To develop effective plans, States must have authority to address sources of pollution including the water quality impacts of hydropower dams.

By providing for State regulation of water quality standards and through State TMDL planning, Congress assigned the States significant pollution control authority. Indeed, Congress not only recognized the "responsibilities and rights of States to prevent, reduce and eliminate pollution," it stated that federal policy is to support State efforts through research, technical services and financial aid. 33 U.S.C. § 1251(b); 33 U.S.C. § 1256(a) (authorizing grants to States "for the prevention, reduction, and elimination of pollution"); 33 U.S.C. § 1370 (requiring that State requirements be at least as stringent as the federal standard); and 33 U.S.C. § 1323 (requiring federal agencies to meet State requirements for the "control and abatement of water pollution").

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[28] An example of EPA-approved water quality standards is ARSD ch. 74:51, South Dakota's standards. http://www.legis.state.sd.us/rules/DisplayRule.aspx?Rule=74:51:01. These standards include the many EPA-required provisions, including classification of waters. ARSD 74:51:03:05 and ARSD 74:51:03:02(2) classify Missouri River reservoirs as "coldwater permanent fish propagation waters." This standard is similar to the one used in North Dakota for the upstream reach of the Missouri River at issue in the proceeding below.

Recognizing State authority to enforce water quality standards is essential to fulfilling the goals of the CWA: the protection of the full array of uses by the public, including recreation in and on the water and the propagation of fish, shellfish, and wildlife. 33 U.S.C. § 1251(a)(2); 40 C.F.R. § 131.10. With the Act's heavy emphasis on controlling "pollution," it would be remarkable if Congress had intended to generally exempt a major source of pollution such as dams operated by the Corps from State water quality standards enforcement.

In *PUD No. 1*, this Court recognized that although water bodies are protected from pollution by discharge permits containing specific requirements for specific types of effluent, water quality standards are important because they measure the health of the stream itself and are a fallback for determining whether the water is becoming polluted. *Id.* at 704. The Court held that the "state water quality standards provide a 'supplementary basis ... so that numerous point sources, despite individual compliance with effluent limitations, may be further regulated to prevent water quality from falling below acceptable levels.'" *Id.* at 704 (citing *EPA v. California ex rel. State Water Resources Control Bd.*, 426 U.S. 200, 205 n.12 (1976)). This fallback or safeguard role is critically important in situations where federal facilities (like Corps' reservoirs) do not hold specific discharge permits for specific types of effluent.

Against this background, the specific issue here is the tension in the CWA between a requirement that the federal agencies must abide by the Act (33 U.S.C. § 1323(a)) and a more limited exemption for navigation. 33 U.S.C. § 1371(a).

The decision of the Eighth Circuit resolved that tension as follows:

> The CWA's preservation of sovereign immunity where the Corps' authority to maintain navigation would be affected and the principles of preemption preclude the enforcement of North Dakota's state water quality standards against the Corps' releases of water from Lake Sakakawea.

In re Operation of the Missouri River System Litigation, 418 F.3d at 920.

Limiting State authority by exempting all federal dams (including hydropower dams) operated by the Corps whenever the Corps merely asserts navigation is affected (as the Eighth Circuit has done) would remove an important tool from the CWA and would prevent States from protecting the broad array of uses designated in State water quality standards for the rivers and streams.

B. Based on Legislative History, the CWA Was Intended to Include Comprehensive Regulation of Federal Facilities.

The congressional history also makes it apparent that the Congress intended to include federal facilities in several facets of CWA regulation. In 1977 Congress amended the CWA, thereby producing a sea change in the way that federal facilities are to be viewed under the CWA. As one example, States obtained authority to impose qualifications on federal permits in 1977. Previously, State authority to impose State conditions on federal permits ("401 conditions") was limited to federal permits issued to nonfederal entities. Pub. L. No. 92-500, § 401. The States were constrained by a provision in the CWA that prohibited States from imposing such conditions on federal licenses if an agency of the federal government was itself the permit applicant. It stated that "no Federal agency shall be deemed to be an applicant for the purposes of this subsection." Pub. L. No. 92-500, § 401(a)(6), App. 12. Importantly, in 1977 the federal exemption was repealed in Pub. L. No. 95-217, § 61(b), App. 16. Due to the 1977 repeal, a federal agency is now subject to State qualifications when that agency obtains a federal license.[25]

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[25] This applies, of course, only to situations where federal permits are actually required. Here, the federal hydropower plants involved are not subject to FERC permitting and 401 qualifications are not imposed on such operations for that reason. In other words, the water quality standards cannot be enforced under the heavy hammer imposed by FERC permitting. Still, that situation is caused by FERC authorization,

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The 1977 amendments also make it clear that Congress intended States to use Section 401 authority to prohibit not only actual pollution events (Section 301) but also to enforce State water quality standards (Section 303). Pub. L. No. 95-217, § 64, App. 16. Thus, Congress expressly included State water quality standards in the group of laws that are enforceable by States as qualifications on federal permits. *Id.* Indeed, the general inclusion of water quality standards in Section 401 permitting (and not just State control over discharges of pollutants) is an issue being considered by this Court.[27] *S.D. Warren Company v. Board of Environmental Protection*, 2005 Me. 27, 868 A.2d 210, *cert. granted in part*, 126 S.Ct. 415, 163 L.Ed.2d 316 (U.S. Oct. 11, 2005) (No. 04-1527).

Moreover, the 1977 amendments waived federal sovereign immunity violations of the CWA by any federal agency. Pub. L. No. 95-217, § 61(a), App. 14-16. While the Congress could have restricted the waiver to particular provisions of the CWA (such as, for example, Section 401), it did not do so. The waiver is applied to direct enforcement against federal facilities, not just for the "401" situation addressed above.

As seen, when Congress enacted the 1977 amendments to the CWA, it linked the explicit waiver of federal immunity from State water quality standard enforcement (adding water quality standards to Section 313 when it stated, "This subsection shall apply notwithstanding any immunity of such agencies . . . under any law or rule of law.") with the removal of the exemption of federal agencies from Section 401 licensing requirements. *See* Pub. L. No. 95-217, § 61(a).

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not the CWA. *Uncompahgre Valley Water Users Ass'n v. F.E.R.C.*, 785 F.2d 269, 274 (10th Cir. 1986). Indeed, the lack of FERC licensing and relicensing (and corresponding lack of 401 consideration) demonstrate that it is all the more important that states take federal agencies directly to task in federal court since they cannot rely on FERC to enforce the CWA when it comes to hydropower facilities.

[27] *S.D. Warren* is a nonfederal facility; the issue therefore arises in the context of an FERC proceeding.

C. States Can Make Real Improvements in Water Quality by Addressing the Pollution From Dams.

The issue presented is not theoretical. States can make real improvements to water quality through regulating dams. The EPA concluded, in its 1989 report to Congress, that impacts can be mitigated through a mix of physical and operational measures and structural changes to dams. The EPA suggests a range of measures that can be taken, ranging from selective withdrawal of reservoir water, to changes in the flow regime, to altering the structure of the dam to change the depth or manner of withdrawal. Report to Congress: *Dam Water Quality Study*, at v-vi.

Further support for the idea that States can make a difference through the regulation of dams can be found in the *USGS Primer* on dams in which USGS concludes that the negative ecological impacts of dams can be better managed through the use of scientific knowledge. *USGS Primer*, at 1-9.

The United States Department of Energy suggests that, after adequate study, a "combination of mitigation techniques, including structural, operational, and regulatory approaches" may be the most effective way to address dissolved oxygen problems at hydropower plants. *Regulatory Approaches*, DOE at 22, 23. *See also* Hayes, D.F. et al., *Enhancing Water Quality In Hydropower System Operations*, 34(3) Water Resources Research, at 471-483 (Mar. 1998) (concluding that operational changes in dam projects can increase dissolved oxygen levels without substantially impacting project purposes).

EPA and State water pollution control agencies are increasingly seeking to evaluate the potential for improving water quality through innovative regulation of dams. Researchers have compiled a list of fifty-five hydropower projects in the Mississippi River basin associated with water quality impaired waters. John Crossman and Associates, *Evaluation of Hydropower Projects and Identification of Potential Opportunities for Pollutant Trading* (2001), *available at*

http://www.epa.gov/msbasin/pdf/hydropower_final.pdf. This report, prepared on behalf of EPA, concluded that:

> [T]hese projects have the potential to make a significant contribution to national water quality objectives if technological advances to improve water quality in reservoirs, downstream tailwaters, and hydro-turbine releases are employed in a watershed based trading program.

Id. at 1.

By using the State water quality standards as approved by the EPA, States can lead dam operators to make meaningful improvements in water quality. Congress clearly intended that States have this authority, and promised in the CWA that government would use its authority to prevent, reduce, and eliminate pollution. States must have authority to enforce water quality standards over facilities operated by the Corps in order to fulfill this promise. Further, Congress did not intend that the mere potential to affect navigation, however insignificant, would strip States of such authority.

CONCLUSION

The Court should grant North Dakota's petition for certiorari.

Respectfully submitted,

LAWRENCE E. LONG*
Attorney General
State of South Dakota

DIANE BEST
Assistant Attorney General
1302 E. Highway 14, Suite 1
Pierre, SD 57501-8501
Telephone: (605) 773-3215

**Counsel of Record*

STATE OF NORTH DAKOTA	IN DISTRICT COURT
COUNTY OF MCLEAN	SOUTH CENTRAL JUDICIAL DISTRICT
State of North Dakota through the North Dakota Department of Health, an Agency of the State of North Dakota, John Hoeven, Governor, and Wayne Stenehjem, North Dakota Attorney General, ex rel. State of North Dakota, Plaintiffs, v. The United States Army Corps of Engineers, a Federal Agency, and General David A. Fastabend, Commander, NW Division, Portland, Oregon, United States Army Corps of Engineers, and LT. Colonel Kurt F. Ubbelohde, District Engineer, Omaha District. Defendants.	**AFFIDAVIT OF JEFFREY HENDRICKSON** **CIVIL NO**

STATE OF NORTH DAKOTA)
) ss
COUNTY OF BURLEIGH)

Jeffrey Hendrickson, being duly sworn, states under oath:

1. I swear and affirm upon penalty of perjury that the statements made in this affidavit are true and correct.

2. I am employed by the North Dakota Game and Fish Department as the Central Fisheries District Supervisor. I conduct and oversee fisheries management and research in Central North Dakota, including the Missouri River System. I am a member of the American Fisheries Society (National), the Dakota Chapter of the American Fisheries Society, and represent North Dakota on the Walleye Technical Committee of the North Central Division of the American Fisheries Society. I have conducted fisheries research and management activities on the Missouri River System since January, 1991. I have authored or co-authored numerous internal reports and one peer reviewed paper regarding all aspects of fisheries research and management on Lakes Sakakawea and Oahe, and the Yellowstone and Missouri rivers. For the past twelve years, I've contributed fisheries information and recommendations to the Missouri River Natural Resources Committee (MRNRC).

3. Lake Sakakawea is North Dakota's number one fishery, accounting for approximately 2 million angler hours of fishing and more than $23 million of angler expenditures annually. Approximately 98% of anglers fishing Lake Sakakawea target walleye or salmon.

4. The smelt population in Lake Sakakawea is very important to the health of the sport fishery and regional economy and the collapse of this critical forage base can have devastating effects. Though a serious collapse of the smelt population has not been observed in Lake Sakakawea, the impacts of a crash have been observed in the next downstream reservoir, Lake Oahe. Driven by the smelt population collapse during the mid to late 1990s, fishing effort in Lake Oahe, South Dakota decreased 68%

in the subsequent years resulting in a reduction in angler expenditures of $16 million.

5. Lake Sakakawea's fishery shows evidence of stress when the late summer volume of coldwater habitat falls below 800,000 acre-feet (generally around an elevation of 1830 feet mean sea level). This stress is caused by shrinking coldwater habitat and is manifested in the fishery through poor growth and condition of walleye and chinook salmon as well as other gamefish. There was a 90% decline in Lake Sakakawea's smelt biomass estimate from 2001 to 2002. Late summer coldwater habitat decreased from slightly more than 800,000 acre-feet in 2001 to less than 200,000 acre-feet in 2002. This has resulted in a substantial reduction in the condition of walleye and other sport fish in Lake Sakakawea.

6. When the volume of coldwater habitat in late summer falls below 200,000 acre-feet (approximately 1825 feet mean sea level), the likelihood of a smelt dieoff increases dramatically. A smelt dieoff occurred in Lake Sakakawea in late summer 1990, when the coldwater habitat was estimated at less than 100,000 acre-feet (1821 feet mean sea level).

7. Prior to the introduction of smelt as a forage fish, the condition and growth of walleye was very poor in Lake Sakakawea, resulting in high natural mortality and low abundances of walleye. Since smelt became well established by 1978, they have composed the vast majority of forage for walleye in Lake Sakakawea. Condition and growth improved, and natural mortality decreased, resulting in Lake Sakakawea becoming one of the premier walleye fisheries in the United States. The fishery is well known for both the size of walleye caught as well as the

numbers of walleye caught. As this fishery has evolved, so has its desirability. The number of walleye fishing tournaments doubled from the mid 1980's to 2001. The number of tournaments decreased to 20 in 2002 due to low water levels.

8. The following is an example of how smelt abundance supports the walleye fishery in Lake Sakakawea. Low water levels and limited coldwater habitat in 1990 caused a smelt die-off. Anglers harvested 0.9 pounds of walleye per angler-day from Lake Sakakawea in 1991 and 1994. The smelt population began to rebound after water levels and coldwater habitat increased in 1994. After a few years of abundant coldwater habitat and good smelt natural reproduction, the walleye harvest improved substantially to 2.7 pounds/angler-day in 1997 and 3.5 pounds/day in 2000. Angler use was also reduced by 25% during the low water year in 1991.

9. The condition of walleye in Lake Sakakawea has been declining since 2000 due to the decline in the smelt population. If these declines in condition continue, natural mortality will increase for walleye. Increased natural mortality will result in lower abundance of walleye and subsequent reductions in angler use.

10. Since 1995, all of North Dakota's and some of other state's walleye eggs needed (nearly 2900 quarts) to meet stocking requests for hundreds of water bodies originated from Lake Sakakawea. Maintaining quality walleye for spring egg taking operations is critical to sustaining walleye fisheries throughout North Dakota. Presently, this is especially true as other historic lakes for walleye eggs in North Dakota have either literally dried

up (Lake Oahe, North Dakota) or have flooded out (Devils Lake).

Dated this 17th day of April, 2003.

/s/ Jeffrey Hendrickson
Jeffrey Hendrickson

Subscribed and sworn to
before me this 17 day of
April, 2003.

/s/ Jaime Pochant
Notary Public

My Commission
Expires 7-22-04

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NORTH DAKOTA
SOUTHWESTERN DIVISION

STATE OF NORTH DAKOTA, through the North Dakota Department of Health, an Agency of the State of North Dakota; JOHN HOEVEN, Governor; WAYNE STENEHJEM, North Dakota Attorney General, ex Rel., State of North Dakota,	)	
Plaintiffs,	)	
vs.	)	
UNITED STATES ARMY CORPS OF ENGINEERS; DAVID A. FASTABEND, General Commander, Northwest Division, Portland, Oregon, United States Army Corps of Engineers; KURT F. UBBELOHDE, Lt. Colonel, District Engineer, Omaha District.	)	CIVIL NO. A1-02-050
Defendants.	)	
STATE OF NEBRASKA,	)	
Intervenor.	)	
STATE OF SOUTH DAKOTA,	)	
Intervenor.	)	

TRANSCRIPT OF HEARING

ON MOTION FOR PRELIMINARY INJUNCTION

Taken at
United States Courthouse
Bismarck, North Dakota
June 4, 2003

BEFORE THE HONORABLE DANIEL L. HOVLAND – CHIEF JUDGE

[216] **LAWRENCE J. CIESLIK,**

being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DISHEROON:

Q. State your name for the record, please, Mr. Cieslik.

A. My name is Lawrence Joseph Cieslik.

Q. And your position, please?

A. I'm the Chief of the Water Management Division for the Corps of Engineers, Northwestern Division, and my duties include the operation of the Missouri River mainstem system.

Q. How long have you held that position?

A. I've been Chief of the Water Management Division since 1997, and prior to that I was the project manager for the Master Manual review and update.

Q. And are you continuing to supervise the preparation of a new Master Manual process?

A. That is correct.

* * *

[224] Q. I want to ask you one or two questions about the Chinook fishery in Lake Sakakawea. And we have had testimony that these fisheries were – the smelt were put in by North Dakota in '71 and the Chinook in '76.

Under the Master Manual as it existed at that time, can you tell us whether or not it would have indicated difficulties at certain times with maintaining the fisheries for these two species?

A. Well, the Master Manual drought criteria as it currently stands would allow Lake Sakakawea to drop to 1775 feet above main sea level. Right now we're at 23, basically. So we're talking about 48 more feet.

Now, I'm not a fisheries expert, but looking at the data that has been presented for the cold-water fishery –

MR. WITHAM: Objection. Speculation.

THE COURT: Overruled.

MR. DISHEROON: Go ahead.

THE WITNESS: – I would assume that it's reasonable to believe that under the Master Manual [225] criteria, that the cold-water fishery volume would go to zero; sometime between where we're at now and down to 1775.

* * *

P.L. 92-500 LAWS OF 92nd CONG. - 2nd SESS. (1972)

"TITLE IV – PERMITS AND LICENSES

"CERTIFICATION

"Sec. 401.(a)(1) Any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 301, 302, 306, and 307 of this Act. In the case of any such activity for which there is not an applicable effluent limitation or other limitation under sections 301(b) and 302, and there is not an applicable standard under sections 306 and 307, the State shall so certify, except that any such certification shall not be deemed to satisfy section 511(c) of this Act. Such State or interstate agency shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications. In any case where a State or interstate agency has no authority to give such a certification, such certification shall be from the Administrator. If the State, interstate agency, or Administrator, as the case may be, fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived with respect

to such Federal application. No license or permit shall be granted until the certification required by this section has been obtained or has been waived as provided in the preceding sentence. No license or permit shall be granted if certification has been denied by the State, interstate agency, or the Administrator, as the case may be.

"(2) Upon receipt of such application and certification the licensing or permitting agency shall immediately notify the Administrator of such application and certification. Whenever such a discharge may affect, as determined by the Administrator, the quality of the waters of any other State, the Administrator within thirty days of the date of notice of application for such Federal license or permit shall so notify such other State, the licensing or permitting agency, and the applicant. If, within sixty days after receipt of such notification, such other State determines that such discharge will affect the quality of its waters so as to violate any water quality requirement in such State, and within such sixty-day period notifies the Administrator and the licensing or permitting agency in writing of its objection to the issuance of such license or permit and requests a public hearing on such objection, the licensing or permitting agency shall hold such a hearing. The Administrator shall at such hearing submit his evaluation and recommendations with respect to any such objection to the licensing or permitting agency. Such agency, based upon the recommendations of such State, the Administrator, and upon any additional evidence, if any, presented to the agency at the hearing, shall condition such license or permit in such manner as may be necessary to insure compliance with applicable water quality requirements. If the imposition of conditions

cannot insure such compliance such agency shall not issue such license or permit.

"(3) The certification obtained pursuant to paragraph (1) of this subsection with respect to the construction of any facility shall fulfill the requirements of this subsection with respect to certification in connection with any other Federal license or permit required for the operation of such facility unless, after notice to the certifying State, agency, or Administrator, as the case may be, which shall be given by the Federal agency to whom application is made for such operating license or permit, the State, or if appropriate, the interstate agency or the Administrator, notifies such agency within sixty days after receipt of such notice that there is no longer reasonable assurance that there will be compliance with the applicable provisions of sections 301, 302, 306, and 307 of this Act because of changes since the construction license or permit certification was issued in (A) the construction or operation of the facility, (B) the characteristics of the waters into which such discharge is made, (C) the water quality criteria applicable to such waters or (D) applicable effluent limitations or other requirements. This paragraph shall be inapplicable in any case where the applicant for such operating license or permit has failed to provide the certifying State, or, if appropriate, the interstate agency or the Administrator, with notice of any proposed changes in the construction or operation of the facility with respect to which a construction license or permit has been granted, which changes may result in violation of section 301, 302, 306, or 307 of this Act.

"(4) Prior to the initial operation of any federally licensed or permitted facility or activity which may result in any discharge into the navigable waters and with

respect to which a certification has been obtained pursuant to paragraph (1) of this subsection, which facility or activity is not subject to a Federal operating license or permit, the licensee or permittee shall provide an opportunity for such certifying State, or, if appropriate, the interstate agency or the Administrator to review the manner in which the facility or activity shall be operated or conducted for the purposes of assuring that applicable effluent limitations or other limitations or other applicable water quality requirements will not be violated. Upon notification by the certifying State, or if appropriate, the interstate agency or the Administrator that the operation of any such federally licensed or permitted facility or activity will violate applicable effluent limitations or other limitations or other water quality requirements such Federal agency may, after public hearing, suspend such license or permit. If such license or permit is suspended, it shall remain suspended until notification is received from the certifying State, agency, or Administrator, as the case may be, that there is reasonable assurance that such facility or activity will not violate the applicable provisions of section 301, 302, 306, or 307 of this Act.

"(5) Any Federal license or permit with respect to which a certification has been obtained under paragraph (1) of this subsection may be suspended or revoked by the Federal agency issuing such license or permit upon the entering of a judgment under this Act that such facility or activity has been operated in violation of the applicable provisions of section 301, 302, 306, or 307 of this Act.

"(6) No Federal agency shall be deemed to be an applicant for the purposes of this subsection.

"(7) Except with respect to a permit issued under section 402 of this Act, in any case where actual construction of a facility has been lawfully commenced prior to April 3, 1970, no certification shall be required under this subsection for a license or permit issued after April 3, 1970, to operate such facility, except that any such license or permit issued without certification shall terminate April 3, 1973, unless prior to such termination date the person having such license or permit submits to the Federal agency which issued such license or permit a certification and otherwise meets the requirements of this section.

"(b) Nothing in this section shall be construed to limit the authority of any department or agency pursuant to any other provision of law to require compliance with any applicable water quality requirements. The Administrator shall, upon the request of any Federal department or agency, or State or interstate agency, or applicant, provide, for the purpose of this section, any relevant information on applicable effluent limitations, or other limitations, standards, regulations, or requirements, or water quality criteria, and shall, when requested by any such department or agency or State or interstate agency, or applicant, comment on any methods to comply with such limitations, standards, regulations, requirements, or criteria.

"(c) In order to implement the provisions of this section, the Secretary of the Army, acting through the Chief of Engineers, is authorized, if he deems it to be in the public interest, to permit the use of spoil disposal areas under his jurisdiction by Federal licensees or permittees, and to make an appropriate charge for such use.

Moneys received from such licensees or permittees shall be deposited in the Treasury as miscellaneous receipts.

"(d) Any certification provided under this section shall set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with any applicable effluent limitations and other limitations, under section 301 or 302 of this Act, standard of performance under section 306 of this Act, or prohibition, effluent standard, or pretreatment standard under section 307 of this Act, and with any other appropriate requirement of State law set forth in such certification, and shall become a condition on any Federal license or permit subject to the provisions of this section.

* * *

Pub. L. No. 95-217, 95th Cong., 1st Sess. (1977)

FEDERAL FACILITY COMPLIANCE

SEC. 61. (a) Subsection (a) of section 313 of the Federal Water Pollution Control Act is amended (*1*) by striking in the first sentence thereof the words "shall comply with Federal, State, interstate, and local requirements respecting control and abatement of pollution to the same extent that any person is subject to such requirements, including the payment of reasonable service charges." and inserting in lieu thereof a comma and the words "and each officer, agent, or employee thereof in the performance of his official duties, shall be subject to, and comply with, all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water

pollution in the same manner, and to the same extent as any nongovernmental entity including the payment of reasonable service charges. The preceding sentence shall apply (A) to any requirement whether substantive or procedural (including any recordkeeping or reporting requirement, any requirement respecting permits and any other requirement, whatsoever), (B) to the exercise of any Federal, State, or local administrative authority, and (C) to any process and sanction, whether enforced in Federal, State, or local courts or in any other manner. This subsection shall apply notwithstanding any immunity of such agencies, officers, agents, or employees under any law or rule of law. Nothing in this section shall be construed to prevent any department, agency, or instrumentality of the Federal Government, or any officer, agent, or employee thereof in the performance of his official duties, from removing to the appropriate Federal district court any proceeding to which the department, agency, or instrumentality or officer, agent, or employee thereof is subject pursuant to this section, and any such proceeding may be removed in accordance with 28 U.S.C. 1441 et seq. No officer, agent, or employee of the United States shall be personally liable for any civil penalty arising from the performance of his official duties, for which he is not otherwise liable, and the United States shall be liable only for those civil penalties arising under Federal law or imposed by a State or local court to enforce an order or the process of such court."; and (2) by adding at the end of such subsection the following: "In addition to any such exemption of a particular effluent source, the President may, if he determines it to be in the paramount interest of the United States to do so, issue regulations exempting from compliance with the requirements of this section any weaponry, equipment, aircraft, vessels, vehicles, or other

classes or categories of property, and access to such property, which are owned or operated by the Armed Forces of the United States (including the Coast Guard) or by the National Guard of any State and which are uniquely military in nature. The President shall reconsider the need for such regulations at three-year intervals."

(b) Section 401(a) of the Federal Water Pollution Control Act is amended by striking paragraph (6) and renumbering and succeeding paragraph accordingly.

COMPLIANCE WITH STATE REQUIREMENTS

SEC. 64. Section 401 of the Federal Water Pollution Control Act is amended by inserting "303," after "302," in the phrase "sections 301, 302, 306, and 307 of this Act", and in the phrase "section 301, 302, 306, or 307 of this Act", each time these phrases appear.